

CREDIT OPINION

12 September 2019

Pre-Sale



Closing date

October 2019

TABLE OF CONTENTS

Capital structure	1
Summary	1
Credit strengths	2
Credit challenges	2
Key characteristics	3
Asset description	4
Asset analysis	8
Securitization structure description	12
Securitization structure analysis	14
Methodology and monitoring	15
Representations & warranties: 17g-7	15
Appendices	16
Moody's related publications	21

Contacts

Daisuke Kitazawa +1.212.553.7752
 VP-Senior Analyst
 daisuke.kitazawa@moodys.com

Sadaf Barkatali +1.212.553.4507
 AVP-SF Legal Review
 sadaf.barkatali@moodys.com

Aimilios Vasimposis +1.212.553.1823
 Associate Analyst
 aimilios.vasimposis@moodys.com

Regatta XII Funding Ltd.

Pre-Sale Report

Capital structure

Exhibit 1

Provisional (P) ratings

Class	Ratings	Amount (\$ millions)	Share of capital structure (%)	Effective subordination (%) ^(a)	Assumed coupon ^(b)
A-1 Notes	(P)Aaa (sf)	248.0	60.7	38.0	3mL+ 1.32%
A-2 Notes	Not rated	13.0	3.2	34.8	3mL+ 1.65%
B Notes	Not rated	43.0	10.5	24.0	3mL+ 1.75%
C Notes	Not rated	24.0	5.9	18.0	3mL+ 2.45%
D Notes	Not rated	22.6	5.5	12.4	3mL+ 3.75%
E Notes	Not rated	15.0	3.7	8.6	3mL+ 6.85%
Subordinated Notes	Not rated	43.0	10.5	n/a	Residual
Total		408.6	100.0		

(a) Effective subordination is based on the target par amount of the portfolio.

(b) 3mL = 3-month USD-LIBOR.

Sources: Underwriter, Moody's Investors Service

Summary

Regatta XII Funding Ltd. (Regatta XII or the CLO) is a typical cash-flow CLO transaction managed by Regatta Loan Management LLC (Regatta or the manager). The CLO is backed by a \$400 million portfolio of non-investment-grade broadly syndicated loans and other assets that the manager purchases from and trades in the primary and secondary markets. In our credit analysis, we considered the attributes of the CLO's underlying assets, including the assets' average default probability, average recovery rate, diversity score, average life and average spread.

The CLO will issue several classes of notes that receive quarterly interest payments and, after the reinvestment period, principal payments, in order of seniority. In addition, the CLO will issue subordinated notes that receive only residual interest and principal payments.

This pre-sale report addresses the structure and characteristics of the proposed transaction based on the information provided to Moody's as of 11 September 2019. Investors should be aware that certain issues concerning this transaction have yet to be finalized. Upon conclusive review of all documents and legal information as well as any subsequent changes in information, Moody's will endeavor to assign definitive ratings to this transaction. The definitive ratings may differ from the provisional ratings set forth in this report. Moody's will disseminate the assignment of definitive ratings through its Client Service Desk. This report does not constitute an offer to sell or a solicitation of an offer to buy any securities, and it may not be used or circulated in connection with any such offer or solicitation.

We measured the credit risk of the CLO's notes using our Moody's CDOEdge™ model, which incorporates the CLO's structural features and asset characteristics noted above.

Credit strengths

- » *Predominantly first-lien senior secured loan exposure:* The CLO must hold a minimum of 90% first-lien senior secured loans and eligible investments. (See Asset description - Concentration Limits)
- » *Remote likelihood of OC-based event of default:* An over-collateralization (OC)-based event of default and the associated liquidation of the portfolio are unlikely, because the event of default par ratio trigger of 102.5% is well below the initial OC level of 156.3%.¹ (See Additional structural analysis)
- » *No note cancellation without payment:* The CLO prohibits noteholders from surrendering their notes without receiving payments, eliminating the possibility of note cancellation to manipulate OC ratios. (See Additional structural analysis)
- » *Involuntary bankruptcy safeguards:* The CLO includes provisions that are helpful in minimizing the risks that a creditor could force an involuntary bankruptcy of the Issuer. (See Legal structure analysis)

Credit challenges

- » *Larger than typical cumulative limit on exchange transactions and transactions pursuant to which defaulted assets can be acquired:* There is a larger than typical cumulative limit on exchange transactions and transactions pursuant to which defaulted assets can be acquired. (See Additional asset analysis)
- » *Current pay assets excluded from WARF calculation:* The CLO excludes current pay assets from the WARF calculation. (See Additional asset analysis)
- » *WAS test calculation permits an inflation of actual WAS when CLO builds excess par, but such excess par can be released as trading gains:* The WAS calculation can overstate the actual weighted average spread of the portfolio's assets by using the lower of the aggregate principal balance and the reinvestment target par balance in the denominator of the calculation. (See Additional asset analysis)
- » *Asset maturity amendments could extend portfolio's WAL and result in exposure to long-dated assets:* The CLO's provisions on amendments that extend assets' maturities could extend the portfolio's weighted average life and result in exposure to long-dated assets. (See Additional asset analysis)
- » *Assets not treated as defaulted until 60 days after bankruptcy proceedings have been instituted against an obligor:* The CLO does not treat an asset as defaulted if the asset's obligor or others have instituted proceedings to have the obligor adjudicated as bankrupt or insolvent or placed into receivership and such proceedings have not been stayed or dismissed within 60 days after being instituted. (See Additional asset analysis)
- » *No objective manager standard of care:* There is no objective standard of care in the transaction's collateral management agreement. (See Legal structure analysis)

In addition to the credit strengths and credit challenges we note above, the transaction includes the following noteworthy features.

- » *Trading gains are treated as interest proceeds to prevent a risk retention deficiency:* Trading gains can be distributed as interest proceeds subject to certain conditions. (See Detailed description of the structure)
- » *Environment, Social and Governance (ESG) consideration:* This CLO may not purchase assets issued by an obligor whose principal business is directly derived from the production or marketing of controversial weapons (including antipersonnel landmines, cluster weapons, chemical and biological weapons) or development of nuclear weapon programs or production of nuclear weapons. To date, US CLOs have not typically incorporated this ESG-related provision.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key characteristics

Exhibit 2

CLO asset summary and related key parties

Portfolio metrics	Base-case modeling assumption*	Identified portfolio**
Portfolio par amount	\$400,000,000	\$376,057,424
Diversity score	60	83
Weighted average rating factor (WARF)	3200	2798
Weighted average spread (WAS)	3.40%	3.56%
Weighted average coupon (WAC)	6.50%	n/a
Weighted average recovery rate (WARR)	46.00%	47.59%
Weighted average life (WAL)	9.0	5.3
Key asset types	Concentration limit	
Senior secured loans, eligible investments	90.0% minimum	
First-lien last-out loans, second lien loans and unsecured loans	10.0%	
Cov-Lite loans	65.0%	
Long-dated assets (unless such obligation is being acquired in an exchange transaction, is a swapped defaulted obligation or is subject to a maturity amendment)	Prohibited	
Key parties		
Manager	Regatta Loan Management LLC	

*We modeled this transaction using our base-case assumptions. We established these assumptions from a combination of the CLO's target initial par amount, the collateral quality test limits that the CLO issuer has provided, characteristics of the portfolio that the manager has identified and/or other adjustments to reflect deal-specific features.

**The identified portfolio represents the assets that the manager has identified as of the time of this report and has acquired or expects to acquire by the CLO's effective date.

Sources: Underwriter, Moody's Investors Service

Exhibit 3

CLO key dates, key parties and structural subordination

Key dates	
Closing date	October 2019
Latest effective date	March 2020
First payment date and payment frequency	April 2020 and quarterly thereafter
End of non-call period	October 2021
End of reinvestment period	October 2024
Legal final maturity	October 2032
Key parties	
Issuer	Regatta XII Funding Ltd.
Co-issuer	Regatta XII Funding LLC
Trustee	U.S. Bank National Association
Collateral administrator	U.S. Bank National Association
Underwriter	BNP Paribas Securities Corp.
Class	Effective subordination(%)
A-1 Notes	38.0
A-2 Notes	34.8
B Notes	24.0
C Notes	18.0
D Notes	12.4
E Notes	8.6

Source: Underwriter

Asset description

The manager will actively manage the CLO, purchasing and selling assets throughout the life of the transaction, subject to satisfying certain criteria. These criteria vary over the life of the CLO, from the closing date until the effective date (ramp-up period), from the effective date until the end of the reinvestment period (reinvestment period), and then until maturity (amortization period).

Assets at effective date

During the ramp-up period, the manager will purchase assets, subject to eligibility criteria, and must satisfy the CLO's target initial par amount, concentration limits and collateral quality tests as of the effective date. Failure to satisfy these effective date criteria will result in the diversion of interest or principal proceeds to purchase assets or repay the CLO's liabilities, until the effective date criteria are in compliance or the manager introduces other remedies.

Eligibility criteria

The types of assets that the CLO can purchase are subject to eligibility criteria. See the Appendix for a list of the CLO's key eligibility criteria.

Target initial par amount

The CLO's target initial par amount represents the minimum aggregate par amount of assets that the CLO is obligated to acquire by the effective date.

Collateral quality test

The CLO also includes collateral quality tests, designed to measure and limit key portfolio characteristics. In the exhibit below, we list each collateral quality test metric and the portfolio characteristic it is designed to limit.

Exhibit 4

Collateral quality test metrics

Metric	Portfolio characteristic
WARF	Average default probability
WARR	Average assumed recovery
WAL	Average stated maturity
Diversity score	Assets' independence
WAS	Average spread
WAC	Average coupon

Asset acquisition guidelines

CLO collateral quality matrix and modifiers

The collateral quality test limits are subject to a collateral quality matrix and modifiers, which allow the manager to choose among alternative combinations of WAS, WARF and Diversity Score limits.

In particular, the transaction will include a recovery rate modifier that will permit an increase in the WARF limit or a decrease in the WAS limit if the WARR exceeds its minimum limit. These adjustments are subject to a maximum WARF of 3300.

Other adjustments to collateral quality tests

LIBOR floor adjusted spread calculation: The CLO includes LIBOR floors in its calculation of the portfolio's WAS for purposes of determining compliance with the CLO's WAS limit.

Concentration limits

The proportion of asset types in the CLO's portfolio are subject to limitations, expressed as a percentage of the portfolio's par amount, as the next two exhibits show.

Exhibit 5

Maximum and minimum concentration limits by asset type

Category	Maximum (unless otherwise indicated), prohibited or not specified
Senior secured loans, eligible investments	90.0% minimum
First-lien last-out loans, second lien loans and unsecured loans	10.0%
Fixed rate assets	7.5%
Cov-Lite loans ⁽¹⁾	65.0%
Long-dated assets (unless such obligation is being acquired in an exchange transaction, is a swapped defaulted obligation or is subject to a maturity amendment)	Prohibited
Current pay assets (purchase limit/threshold for treatment as defaulted)	5.0%/7.5%
Caa assets (based on facility rating)	7.5%
Discount assets	25.0%
Delayed drawdown/revolving assets	10.0%
DIP loans	7.5%
Participations	15.0%
Aggregate third party limit	Satisfied
Loans with original issuances equal to or more than \$150,000,000 and less than \$250,000,000	5.0%
Loans with original issuances less than \$150,000,000	Prohibited
Single obligor:	2.0%
Except up to three obligors, each	2.5%
Not senior secured loans, each	1.0%
Collateral obligations purchased for less than the minimum price	2.5%
Payment Frequency:	
less frequently than quarterly	5.0%
less frequently than semiannually	Prohibited
Deferrable and partial deferring	Prohibited
Securities with attached equity	Prohibited
Leases	Prohibited
Bridge loans	Prohibited
Structured finance obligations	Prohibited
Synthetic securities	Prohibited
Step-downs	Prohibited
Step-ups	Prohibited
Emerging market obligors	Prohibited

(1) The CLO's indenture defines a "Cov-Lite loan" as: a loan that (a) does not contain any financial covenants, or (b) (i) requires the borrower to comply with one or more financial covenants only upon the occurrence of certain actions of the borrower as identified in the underlying instrument (including, but not limited to, a debt issuance, dividend payment, share purchase, merger, acquisition or divestiture), but (ii) does not require the borrower to comply with one or more financial covenants during each reporting period, without regard to whether it has taken any specified action, provided that for all purposes a loan described in clause (a) or (b) above which either contains a cross-default or cross-acceleration provision to, or is pari passu with, another loan of the underlying obligor that requires the obligor to comply with either a financial covenant or a maintenance covenant (which maintenance covenant may require compliance only if such facility is drawn or is drawn above a threshold amount) will be deemed not to be a Cov-Lite Loan.

Source: Transaction documents

Exhibit 6

Maximum and minimum geographic concentration limits

Geography	Maximum
Other than the US	20.0%
Other than the US and Canada	15.0%
Austria, Belgium, Denmark, Finland, France, Liechtenstein, Iceland, Luxembourg, Norway and Singapore (aggregate)	7.5%
Singapore	5.0%
Greece, Italy, Portugal, Spain (aggregate)	0.0%
Tax advantage jurisdictions (aggregate)	5.0%

Source: Transaction documents

Identified portfolio

The three exhibits below provide information about the portfolio, as of August 26, 2019, that includes assets the manager has acquired or has identified and expects to acquire by the CLO's effective date. As of the closing date, the manager will have invested approximately 80% of the CLO's issuance proceeds and will invest the remaining proceeds by the effective date.

Exhibit 7

Metrics of identified portfolio

Attribute	Metric
Portfolio par amount	\$376,057,424
Diversity score	83
WARF	2798
WAS	3.56%
WAC	n/a
WARR	47.59%
WAL	5.3

Source: Underwriter

Exhibit 8

Rating Distribution of Identified Portfolio

% relative to the identified portfolio's par amount

Facility rating	% of par
Baa3	1.0
Ba1	1.4
Ba2	8.0
Ba3	11.0
B1	25.0
B2	46.1
B3	6.9
Caa1	0.6
Caa2	0.1
Total	100.0

Obligor's default probability rating	% of par
Baa2	0.6
Baa3	0.4
Ba1	1.0
Ba2	2.9
Ba3	7.3
B1	17.2
B2	37.5
B3	28.6
Caa1	4.5
Total	100.0

Source: Underwriter

Exhibit 9

Top 5 industries of identified portfolio

% relative to the identified portfolio's par amount

Industry	% of par
High Tech Industries	11.1
Banking, Finance, Insurance & Real Estate	10.1
Hotel, Gaming & Leisure	9.3
Services: Business	9.0
Healthcare & Pharmaceuticals	6.9
Total	46.4

Source: Underwriter

Manager

Regatta is a New York-based asset manager. The manager, as an agent for the CLO, is responsible mainly for selecting and trading assets, ensuring that the CLO is in compliance with its contractual obligations, and, together with the CLO's trustee, periodic reporting. The exhibit below details key attributes of the manager.

Exhibit 10

Manager details

Attribute	Metric
Management entity	Regatta Loan Management LLC
Assets under management	\$12.3 billion
Number of CLO professionals	26
Average number of years of experience	24 years (Senior management team), 13 years (Research team)
Number of CLOs currently managed	10

Source: Underwriter

Assets after effective date

After the effective date, the manager may trade assets over the life of the CLO, subject to (1) reinvestment restrictions, including those that depend on whether a CLO is in its reinvestment period, (2) the eligibility criteria, (3) the collateral quality tests, and (4) the concentration limits. The eligibility criteria, collateral quality tests, and concentration limits are the same as described in "Assets at effective date" above. If, in connection with a proposed purchase, a test or criterion is not satisfied, the degree of compliance with the test must be maintained or improved after giving effect to the investment.

However, certain trading may be prohibited if (A) we have (1) withdrawn and not reinstated the rating of Class A-1 notes or (2) downgraded the initial ratings of the Class A-1 notes by one or more subcategories, and (B) the portfolio's par amount is less than its effective date amount. In particular, such prohibitions would apply to purchases of assets after the reinvestment period and discretionary trading during and after the reinvestment period, unless a majority of the controlling class consents to reinstate such trading. We note that the conditions restricting trading vary across CLOs, and we consider their impact in the context of each transaction.

If the CLO obtains sufficient noteholder consents, the manager can effect certain sales and purchases that do not conform to the CLO's trading criteria. The manager may sell or purchase any asset if noteholders representing at least 75% of the aggregate outstanding amount of each class of notes consent to such sale or purchase.

Reinvestment period

During the CLO's reinvestment period, the manager may engage in trading activity, including (1) sales of equity securities or assets that are credit improved, credit risk or defaulted, (2) discretionary sales, subject to an annual limit of 30% of the portfolio's par amount for the first twelve months and 25% for any subsequent twelve calendar month period, and (3) purchases of assets with the proceeds of such sales and prepayments. This CLO's indenture requires all purchases to comply with the eligibility criteria, collateral quality tests, coverage tests, concentration limits and restrictions on the manager's ability to engage in trades that cause a reduction in the portfolio's par amount.

Amortization period

After the reinvestment period, the manager may (1) sell assets subject to the same restrictions that apply during the reinvestment period, and (2) if certain conditions are met, purchase assets using principal proceeds from prepayments and sales of credit risk assets. Specifically, in addition to satisfying the trading conditions applicable during the reinvestment period, the CLO requires that each OC test and Caa concentration limit is satisfied. In addition, the purchased asset's rating must be at least equal to that of the sold or prepaid asset and the stated maturity date of each purchased asset cannot be later than that of the sold or prepaid asset.

Asset analysis

Primary asset analysis

Modeling

Moody's CDOEdge™ model is the principal model that we use to rate CLOs globally. Moody's CDOEdge™ estimates expected loss on a CLO's tranches using a model that is based on the binomial expansion technique and cash-flows as dictated by the CLO's structure. It relies on a number of assumptions to model assets, including average default probability, average recovery rate, diversity score, average life, and average spread of a CLO's assets.

Our base case modeling assumptions appear in the exhibit below. These assumptions are not necessarily the transaction's limits or expected levels.

Exhibit 11

Base-case modeling assumptions

Portfolio par amount	\$400,000,000
Diversity score	60
WARF	3200
WAS	3.40%
WAC	6.50%
WARR	46.00%
WAL	9.0

Source: We base our assumptions on a combination of information that the underwriter has provided, transaction documentation, and metrics of the manager's other CLOs.

WAL considerations: We modeled the portfolio's maximum nine year life using an amortization profile evenly distributed over 2.5 years. We also analyzed an amortization profile that was evenly distributed over 5 years. It is important to note that the WAL, in conjunction with the assumed WARF, determines the modeled portfolio default probability. The longer the WAL, the higher the assumed default probability.

Collateral quality matrix and other adjustments: Prior to the closing date, we will model alternative combinations of the collateral quality tests, as the collateral quality matrix and modifiers specify, to help determine the assigned ratings.

Comparables

Below, we compare the key performance statistics of this manager's other CLOs. We also compare key characteristics of this CLO's assets to those of other managers' recent CLOs.

Performance of other Regatta CLOs

The manager's three recent transactions are passing their collateral quality and OC tests, as the exhibit below shows.

Exhibit 12

Comparison of characteristics: This CLO and three of the manager's other transactions

	Regatta XII Funding Ltd.	Regatta XI Funding Ltd.	Regatta X Funding Ltd.	Regatta VII Funding Ltd.
Closing date	October 2019	6/26/2018	12/21/2017	10/20/2016
Reinvestment period end date	October 2024	6/26/2023	1/17/2023	12/21/2020
Maturity date	October 2032	7/17/2031	1/17/2031	12/20/2028
Trustee report date	n/a	6/30/2019	6/30/2019	7/1/2019
Total par	\$400,000,000	\$500,862,653	\$526,753,703	\$400,125,808
Defaulted par	\$0	\$0	\$0	\$0
	Base case assumptions and covenants	Reported Covenants	Reported Covenants	Reported Covenants
WARF	3200	2781 2836 PASS	2812 2863 PASS	2822 2891 PASS
Diversity	60	88 85 PASS	89 85 PASS	89 80 PASS
WAS	3.40%	3.21% 3.07% PASS	3.23% 3.10% PASS	3.44% 3.00% PASS
WAL (years)	9.0	5.2 8.3 PASS	5.2 7.7 PASS	5.2 6.0 PASS
WARR	46.00%	47.90% 43.00% PASS	47.80% 43.00% PASS	47.70% 43.00% PASS
Caa %	7.50%	0.72% 7.50% PASS	1.08% 7.50% PASS	2.07% 7.50% PASS
Class A/B OC test	121.58%	131.81% 121.60% PASS	132.89% 122.45% PASS	131.62% 121.58% PASS
Class C OC test	113.95%	123.52% 115.30% PASS	123.11% 114.70% PASS	122.36% 114.32% PASS
Class D OC test	108.09%	115.01% 108.80% PASS	114.67% 108.29% PASS	114.98% 108.94% PASS
Class E OC test	104.41%	108.88% 104.70% PASS	109.06% 104.70% PASS	108.73% 104.70% PASS
Interest diversion test	105.41%	108.88% 105.20% PASS	109.06% 105.20% PASS	108.73% 105.20% PASS

Source: Trustee reports

Peer pool characteristics of Regatta XII and other transactions

Regatta XII is largely similar to other recently closed broadly syndicated loan CLOs, as the exhibit below shows.

Exhibit 13

Comparison of characteristics: Regatta XII and other recently closed US BSL CLOs

Deal name	Regatta XII Funding Ltd.	Vibrant CLO XI, Ltd.	Rockford Tower CLO 2019-2, Ltd.
Closing date	October 2019	August 2019	August 2019
Manager	Regatta Loan Management LLC	Vibrant Credit Partners, LLC	Rockford Tower Capital Management, L.L.C.
Key modeling assumptions			
Portfolio par amount	\$400,000,000	\$500,000,000	\$500,000,000
WARF (base case)	3200	2708	2713
WAS (base case)	3.40%	3.40%	3.30%
WAC (base case)	6.50%	n/a	7.50%
WARR (base case)	46.00%	45.50%	47.00%
WAL (base case)	9.0	9.0	9.0
Diversity score (base case)	60	75	55
Key attributes			
Reinvestment period (years)	5.0	5.0	5.0
Senior secured loans, cash and eligible investments (minimum)	90.0%	90.0%	90.0%
Caa purchase limit	7.50%	7.50%	7.50%
Subordination to the senior-most tranche	38.0%	35.0%	35.0%

Source: Moody's Investors Service

Additional asset analysis

Analysis of collateral quality and coverage tests

Larger than typical cumulative limit on exchange transactions and transactions pursuant to which defaulted assets can be acquired:

Exchange transactions permit the manager to exchange a defaulted asset for another defaulted asset or for a credit risk asset. This CLO has a cumulative limit of 15% on the amount of assets that may be subject to such exchanges. In addition, this CLO allows the manager to use the proceeds from sale of a defaulted asset to purchase another defaulted asset, subject to a cumulative limit of 5% on such purchased defaulted assets. The larger than typical combined limit on such transactions raises concerns that the variability of the portfolio's WARR could increase. Moreover, such exchange transactions could also result in long-dated assets comprising up to 3% of the portfolio's par amount. Any such assets remaining at the CLO's legal maturity date will expose the noteholders to liquidation risk.

These exchanges are, however, subject to certain restrictions, including (i) the manager's reasonable belief that the new asset has a higher likelihood of recovery than the exchanged asset (in the case of the exchange transaction) or the expected recovery of such purchased asset is no less than the expected recovery on the sold defaulted asset, (ii) the new asset is no less senior than the exchanged or sold asset in right of payment and (iii) each coverage test will be satisfied, or if not satisfied, maintained or improved after giving effect to the exchange or purchase.

To address this risk, we conducted an additional cash flow analysis assuming a lower WARR and a 3% exposure to long-dated assets with a maturity date two years after the stated maturity date of the notes. We view the sensitivity of the modeling results as acceptable.

Current pay assets excluded from WARF calculation: The CLO excludes current pay assets from the WARF calculation. As a result, the reported WARF could underestimate the default probability of the actual portfolio. To address this risk of a higher WARF, we conducted an additional sensitivity analysis by assuming that the WARF of the portfolio is higher than the WARF covenant. We view the sensitivity of the modeling results as acceptable.

WAS test calculation permits an inflation of actual WAS when CLO builds excess par, but such excess par can be released as trading gains: When the portfolio's par amount is in excess of the reinvestment target par balance, the WAS calculation can overstate the actual weighted average spread of the portfolio's assets by using the lower of the aggregate principal balance and the reinvestment target par balance in the denominator of the calculation. However, the CLO is not required to maintain the excess par amount. Moreover, such excess par amount can be released as trading gains (see Detailed description of the structure).

To address the risk to the rated notes of a portfolio whose actual WAS is less than the WAS test indicates, we conducted an additional sensitivity analysis by lowering WAS. We view the sensitivity of the modeling results as acceptable.

Asset maturity amendments could extend portfolio's WAL and result in long-dated assets: The manager may not consent to amendments that extend the maturity of any asset beyond the legal maturity date of the notes ("long-dated assets"). In addition, as a result of any such amendment, the WAL test must either be satisfied or, if not satisfied, maintained or improved.

However, up to 12.5% the portfolio may consist of assets whose maturities are extended without regard to such WAL test restriction if the amendment is necessary (x) (i) to prevent the asset from becoming a defaulted obligation or (ii) due to the material adverse financial conditions of the obligor, to minimize material losses on the asset, or (y) such amendment or modification is in connection with an insolvency, bankruptcy, reorganization, debt restructuring or workout of the issuer or obligor of a defaulted obligation. As a result, maturity amendments could extend the portfolio's WAL. Maturity amendments could also result in long-dated assets comprising up to 2% of the portfolio's par amount in total. Any such assets remaining at the CLO's legal maturity date will expose the noteholders to liquidation risk.

To address the risk to the rated notes of a longer portfolio WAL and exposure to long-dated assets, we conducted additional sensitivity analysis assuming a WAL of 9.6 years instead of 9 years and assuming 2% of the portfolio consist of assets that have maturities beyond that of the CLO. We view the sensitivity of the modeling results as acceptable.

Assets not treated as defaulted until 60 days after bankruptcy proceedings have been instituted against an obligor: The CLO does not treat an asset as defaulted if the asset's obligor or others have instituted proceedings to have the obligor adjudicated as bankrupt or insolvent or placed into receivership and such proceedings have not been stayed or dismissed within 60 days after being instituted or

such obligor has filed for Chapter 11 protection under the US Bankruptcy Code. During this time, the CLO's OC tests would not reflect such asset as defaulted, thereby overstating the test levels.

To address the risk to the rated notes of overstating the OC test levels, we conducted an additional sensitivity analysis in which we assumed a lag in the recognition of defaulted assets in the OC tests. We view the sensitivity of the modeling results as acceptable.

Analysis of eligibility criteria and concentration limits

Use of obligation ratings weaken Caa asset purchase limit, but other limits mitigate: This CLO includes a 7.5% Caa asset purchase limit based on our obligation ratings rather than our default probability ratings, the latter being a measure of default risk in our model and the basis for the portfolio's WARF calculation. Because our obligation rating for a given first-lien senior secured loan facility is typically better than its default probability rating, the portfolio's actual Caa concentration, measured by default probability ratings, could be higher than 7.5%.

Nonetheless, the CLO's WARF covenant provides a practical restriction on the purchase of a large percentage of assets whose default probability ratings are Caa1 or below. To maintain compliance with the WARF covenant, the vast majority of the portfolio would have to consist of assets of much higher credit quality. We believe that such a portfolio composition is not realistic given both the current and historical mix of leveraged loans available in the market.

Manager assessment

We believe that Regatta is capable of managing this CLO because of its experience in the leveraged loan market and in managing CLOs. As of April 2019, Regatta had over \$12.3 billion in assets under management. Regatta currently manages approximately \$5.1 billion in ten CLOs. The group employs 26 investment professionals, with the senior management team having an average of 24 years of experience.

We view Regatta's operational systems and controls as adequate to support its CLO platform. We maintain an on-going dialogue with the manager, both in our operations reviews and as part of our surveillance of its CLOs.

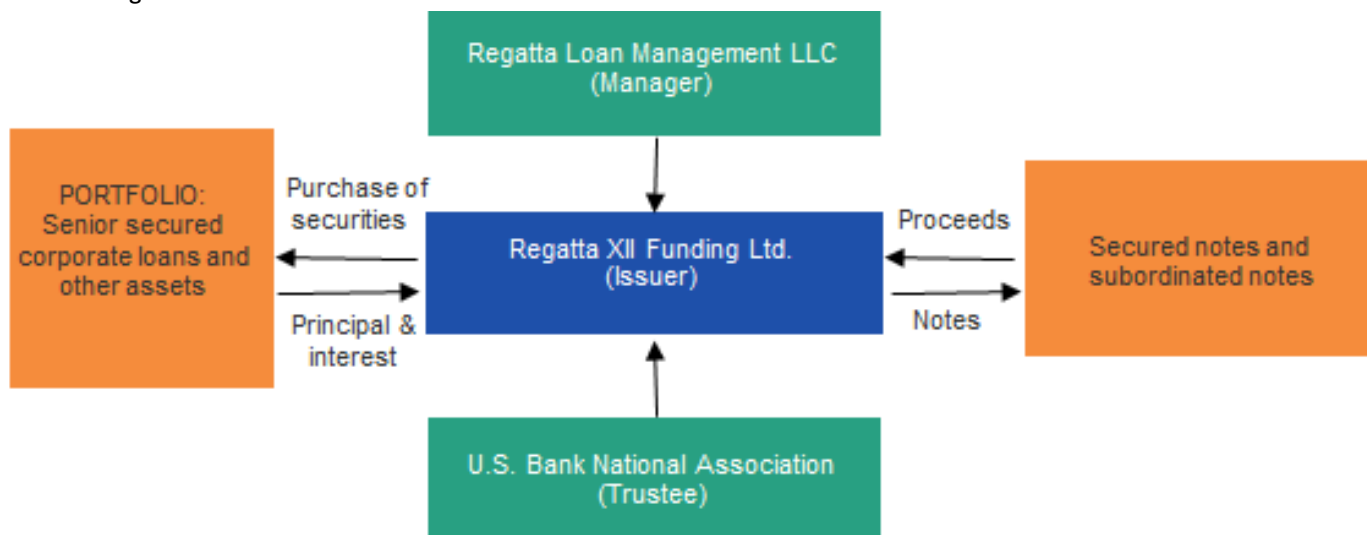
Securitization structure description

This CLO is structured using a bankruptcy-remote Cayman Islands special purpose entity that issues liabilities as listed in Exhibit 1 above. The proceeds from the issuance are invested in secured assets that generate cash flows from interest, principal, and, if the manager trades assets, trading gains or losses, as we describe in the Asset description section above. Those cash flows are distributed in accordance with the CLO's priority of payments, subject to over-collateralization (OC) and interest coverage (IC) tests.

The exhibit below shows the CLO's key parties and cash flows.

Exhibit 14

Structure diagram



Source: Moody's Investors Service

Detailed description of the structure

Priority of payments

This CLO's payment waterfall is consistent with that of a typical CLO. The CLO pays the notes sequentially in both the interest and principal waterfalls. Both waterfalls include OC and IC tests. The interest waterfall also includes an interest diversion test that is applicable during the reinvestment period. (See the Appendix for interest and principal waterfall details.)

Trading gains are released as interest proceeds to prevent a risk retention deficiency: In this CLO, trading gains can be released as interest proceeds to prevent a risk retention deficiency and are subject to certain conditions. First, they are defined as all payments received in excess of the greater of (a) asset's principal balance and (b) the original purchase price (excluding accrued interest) of such asset. In addition, they can only be distributed as interest proceeds so long as (i) collateral par amount is greater than the reinvestment target par, and (ii) WARF and WAL are satisfied.

Designation of principal proceeds as interest proceeds: Prior to the third determination date, the manager can designate a certain amount of principal proceeds in the ramp-up account to be treated as interest proceeds. Such amount is limited to 1% of the portfolio's target initial par amount. The designation is subject to satisfaction of the aggregate ramp-up par condition measured on a pro forma basis after giving effect to the treatment of principal proceeds as interest proceeds.

Coverage tests and interest diversion test

Exhibit 15

OC, interest diversion and IC tests

Tests	Trigger level	Expected initial level
Class A/B OC test	121.58%	131.58%
Class C OC test	113.95%	121.95%
Class D OC test	108.09%	114.09%
Class E OC test	104.41%	109.41%
Interest diversion test	105.41%	109.41%
Class A/B IC test	120.00%	n/a
Class C IC test	110.00%	n/a
Class D IC test	105.00%	n/a

Source: Transaction documents

Over-collateralization test: OC tests, present in all CLOs, provide protections for the CLO's notes. If the OC level for a particular class of notes falls below the OC trigger for that class, the deal diverts cash flows to the senior-most class until the breached OC ratio meets the trigger level.

Common to most CLOs, excess Caa assets are carried at their market values in the calculation of the OC ratios. Excess Caa assets are those Caa securities whose aggregate principal balance exceeds 7.5% of the portfolio's principal balance.

Interest diversion test: If the OC ratio for the Class E Notes falls below the interest diversion trigger level, the CLO will divert the lesser of 50% of available interest proceeds and the amount necessary to cure the test to purchase additional assets.

Interest coverage test: IC tests, which measure a CLO's excess interest cash flow, also provide protections for the CLO's notes. If the IC level for a particular class of notes falls below the IC trigger for that class, the deal diverts cash flows to the senior-most class until the breached IC ratio meets the trigger level.

Security interest, bankruptcy remoteness and safeguards of against involuntary bankruptcy

Security interest: With minor exceptions, the assets of the CLO are pledged to the trustee for the benefit of the noteholders. Prior to closing, the CLO will certify to and provide representations affirming the validity of this pledge. The security interest granted can provide noteholders with additional protections and a greater degree of control in cases where difficulties have developed with the transaction's structure.

Bankruptcy remoteness: The CLO will be a special purpose entity, will have no prior operating history, and will be established for the limited purposes of acquiring the assets, issuing the notes, and performing certain related activities. Given this typical legal structure, we are able to analyze this transaction as bankruptcy remote.

Safeguards against CLO's involuntary bankruptcy: The CLO incorporates certain safeguards against the Issuer's involuntary bankruptcy.

Note redemption and cancellation

This CLO can effect an optional redemption of the notes by either (1) obtaining manager's certification that there will be sufficient proceeds to fully redeem all of the notes, or (2) entering into binding agreements with one or more financial or other institutions. Moreover, the transaction permits the CLO to withdraw a notice of redemption up to a business day before the scheduled redemption date.

The CLO prohibits noteholders from surrendering their notes for cancellation without receiving payments.

Benchmark rate fallback language

The floating rate note coupons reference Libor which is earmarked for withdrawal after 2021. Intending to facilitate transition to an alternative reference rate, the transaction documents incorporate fallback language addressing both the timing of transition and the choice of alternative reference rate.

The transaction documents provide that if there is (i) a material disruption to Libor; (ii) a material change in the methodology of calculating Libor; or (iii) Libor ceases to exist or ceases to be reported on the Reuters Screen, and the manager reasonably believes any of the above events will occur within six months and no alternative reference rate has been approved by a majority of the controlling class noteholders and a majority of the holders of the subordinated notes within sixty days of the occurrence of any such events, the manager will select a designated reference rate without any noteholder consent based on among any of the following (1) the quarterly rate proposed by the Federal Reserve's Alternative Reference Rates Committee; (2) the quarterly rate acknowledged as a standard rate by the Loan Syndications and Trading Association® or (3) the reference rate that is being used in at least 50% (by principal amount) of the collateral obligations included in the CLO or the floating rate securities issued in the new-issue collateralized loan obligation market in the prior month that bear interest based on a reference rate other than Libor. Notwithstanding the foregoing, for the purpose of calculating the interest due on the floating rate notes, any selected reference rate will at no time be less than 0.0% per annum.

Securitization structure analysis

Primary structural analysis

Expected loss and modeling analysis

We expect the losses on the rated notes to be consistent with our benchmark rating targets. This expectation is based on our analysis using Moody's CDOEdge™ model.

Moody's CDOEdge™ model is the principal model that we use to rate CLOs globally. Based on the binomial expansion technique, the model estimates expected loss on a CLO's tranches. It relies on a number of assumptions, including average default probability, average recovery rate, diversity, average life, and average spread of a CLO's assets. The model incorporates various scenarios for default timing and interest rate paths. The model allocates cash flows arising from the assets in accordance with the CLO's documentation. We fully describe our approach to modeling and rating CLOs in [Moody's Global Approach to Rating Collateralized Loan Obligations](#).

Additional structural analysis

OC analysis

Remote likelihood of OC-based event of default: We view the occurrence of an OC-based event of default and the associated liquidation of the portfolio as unlikely. The event of default par ratio trigger is set at 102.5%, well below the initial level of 156.3%. The calculation, which is based on the ratio of the portfolio's par amount to the outstanding principal amount of the Class A-1 notes, incorporates haircuts for defaulted assets, but not for Caa or deep-discount assets. Portfolio liquidation following an event of default based on breach of the trigger requires consent from majority of Class A-1 noteholders.

Interest rate risk

Interest rate mismatch: Because this CLO will issue only floating-rate notes, but may acquire fixed-rate assets that constitute up to 7.5% of the portfolio, there could be a mismatch between the interest cash flows on the assets and liabilities. To analyze this risk, in addition to modeling a base case assuming all floating rate assets, we modeled a case assuming that 7.5% of the portfolio constitutes fixed rate assets. The expected loss results in both cases were consistent with the assigned ratings.

Note redemption and cancellation analysis

Note redemption: One way in which this CLO can effect an optional redemption of the notes relies upon the Manager's certification that there will be sufficient proceeds to fully redeem all of the notes. Although many other CLOs apply haircuts to the assets' market values when determining the sufficiency of such proceeds, thereby providing cushion against market value declines, this CLO does not incorporate such haircuts. Therefore, the transaction could face a situation in which there are insufficient liquidation proceeds to redeem the notes in full if a large decline in asset prices occurs during the redemption process.

In addition, this CLO can effect an optional redemption of the notes if the manager provides evidence to the trustee that it has entered into binding agreements with one or more financial or other institutions to purchase all or a portion of the assets in an amount sufficient to redeem all of the outstanding notes. To mitigate the risk of having insufficient redemption proceeds following a default of a purchasing institution, many CLOs require each purchasing institution to have a short-term rating of P-1. This CLO does not incorporate such a requirement.

However, the transaction includes two mitigants to these risks. First, it permits the Issuer to withdraw a notice of redemption up to one business day before the scheduled redemption date. Second, a failed optional redemption does not constitute an event of default under the terms of the CLO.

Note cancellation: The CLO's prohibiting noteholders from surrendering their notes without receiving payments eliminates the possibility of using note cancellation to manipulate OC ratios.

Legal structure analysis

Safeguards against CLO's involuntary bankruptcy: The CLO includes provisions that we view as helpful to protect it against involuntary bankruptcy. In addition to including non-petition covenants binding on all noteholders and other secured parties, the transaction incorporates an affirmative obligation of the CLO to take all actions necessary to defend and dismiss any involuntary bankruptcy or insolvency petitions or filings against the CLO. Noteholders also agree to be subject to a subordination agreement, whereby any noteholder who causes the filing of an involuntary bankruptcy petition against the CLO in violation of the non-petition covenant is deemed to acknowledge that any claim that noteholder has to the assets will be subordinated to the claims, until paid in full, of all noteholders who did not seek to file the petition.

No objective manager standard of care: The collateral management agreement (CMA) for this transaction does not contain an objective standard of care whereby the manager agrees to perform its obligations in a manner consistent with practices and procedures followed by institutional managers of national standing. This manager could be viewed as an institutional manager of national standing. The CMA does contain a standard of care whereby the manager agrees to perform its obligations with reasonable care, using a degree of skill and attention no less than that which it exercises with respect to comparable assets that it manages for itself and others. We typically see both standards of care included in CMAs. Nonetheless, given the manager's extensive experience in the leveraged loan market and in managing CLOs, we do not expect the absence of an objective standard of care to have a material negative credit impact on the rated notes.

Tax considerations: Counsel to the Issuer is expected to opine on the Issuer's status under current United States tax law at closing. We expect such counsel will conclude that the Issuer's activities, as permitted by the transaction documents, will not cause the Issuer to be operating a trade or business in the U.S. and thus the Issuer will not be subject to U.S. federal income tax on a net income basis.

To reduce the risk that the CLO be considered engaged in a trade or business in the United States, under certain circumstances, the CLO may transfer certain equity securities and workout securities to one or more wholly-owned subsidiaries formed for the purpose of owning these types of securities. In our analysis, we took into account the limited purposes and operations of such subsidiaries.

Methodology and monitoring

Rating methodologies

[Moody's Global Approach to Rating Collateralized Loan Obligations](#)

To access this report, click on the entry above. Note that this reference is current as of the date of publication of this report and that a more recent report may be available. All research may not be available to all clients.

Monitoring

If we assign definitive ratings to the notes of this transaction, we will monitor the ratings on an ongoing basis. We will announce and disseminate any subsequent changes in the ratings through our Client Service Desk, and we will publish a performance overview on a regular basis on our website.

Representations & warranties: 17g-7

The Rule 17g-7 Report of Representations and Warranties is hereby incorporated by reference and can be found at http://www.moodys.com/viewresearchdoc.aspx?docid=PBS_1192607.

Appendices

WARF - Sensitivity analysis

Moody's has also conducted the sensitivity analysis below which provides the number of notches by which the model- indicated output of the deal would have varied if different assumptions had been made as to certain key model parameters.

If the WARF was increased by 15% and 30% and other assumptions remained unchanged, the model-indicated output of notes would change as shown in the exhibit below.

Exhibit 16

WARF - Sensitivity analysis

Class	Impact of increasing WARF by 15%	Impact of increasing WARF by 30%
A-1 Notes	-1	-3

Source: Moody's Investors Service

The analysis results are model-indicated outputs, which are one of the many quantitative and qualitative factors considered by rating committees in determining actual ratings. The 15%/30% increase is not meant to correspond to any specific economic or rating analysis scenarios. This analysis does not intend to measure how the rating of the deal might migrate over time, but rather, how the initial model-indicated output of the deal might have differed if certain key model parameters had been varied.

Modeling assumptions

The exhibit below summarizes our modeling assumptions for several key scenarios that we analyzed.

Exhibit 17

Key modeling scenarios

	WARF	WAL(a)	WAS	WARR(b)	Diversity score	WAC
Base case (100% floating-rate assets)	3200	9	3.40%	46.0%	60	n/a
92.5% floating rate assets and 7.5% fixed-rate assets	3200	9	3.40%	46.0%	60	6.50%
5-year amortization profile	3200	9	3.40%	46.0%	60	n/a
Exchange and purchased defaulted transactions	3200	9.1	3.40%	44.0%	60	n/a
WARF excludes current pay assets	3448	9	3.40%	46.0%	60	n/a
Excess par WAS inflation	3200	9	3.09%	46.0%	60	n/a
Maturity amendment	3200	9.6	3.40%	46.0%	60	n/a
Delayed recognition of default	3200	9	3.40%	46.0%	60	n/a

(a) The WAL, in conjunction with the assumed WARF, determines the modeled portfolio default probability.

(b) Our methodology assumes a 50% recovery rate for a first-lien senior secured loan whose facility rating is one notch above its corporate family rating. Given that this transaction's portfolio consists of a minimum of 90% first-lien senior secured loans, our assumed portfolio average recovery rate will most likely be higher than the covenant.

Source: Moody's Investors Service

Eligibility criteria

The key eligibility criteria for any asset are as follows:

1. is a senior secured loan, a first-lien last-out loan, a second lien loan, an unsecured loan or a DIP collateral obligation;
2. is U.S. Dollar denominated and is not convertible by (a) the Issuer or (b) the obligor of such collateral obligation into any other currency, with any payments under such collateral obligation to be made only in U.S. Dollars;
3. unless such obligation is a DIP obligation, is not a defaulted obligation or a credit risk obligation (unless such defaulted obligation or credit risk obligation is being acquired in connection with an exchange transaction or is a swapped defaulted obligation);
4. is not a bond, a letter of credit or other type of security;
5. is not a lease (including a finance lease);
6. is not a structured finance obligation or a synthetic security;
7. is not a deferrable obligation or a partial deferring obligation;
8. provides for a fixed amount of principal payable on scheduled payment dates and/or at maturity and does not by its terms provide for earlier amortization or prepayment at a price of less than par;
9. does not pay scheduled interest less frequently than semi-annually;
10. does not constitute margin stock;
11. gives rise only to payments that are not subject to withholding taxes, other than withholding taxes imposed on amendment fees, waiver fees, consent fees, extension fees, commitment fees or similar fees, or withholding taxes imposed pursuant to FATCA, unless the related obligor is required to make "gross-up" payments that ensure that the net amount actually received by the Issuer (after payment of all such taxes) equals the full amount that the Issuer would have received had no such taxes been imposed;
12. unless acquired in connection with an exchange transaction, has a Moody's rating (or, solely in the case of a DIP collateral obligation, had such a rating by Moody's before it was withdrawn, in the case of a point-in-time rating assigned within 12 months preceding the date of such purchase or acquisition);
13. is not a debt obligation whose repayment is subject to substantial non-credit related risk as determined by the collateral manager;
14. is not an obligation (other than a revolving collateral obligation or delayed drawdown collateral obligation) pursuant to which any future advances or payments, other than excepted advances, to the borrower or the obligor thereof may be required to be made by the Issuer;
15. will not require the Issuer, the co-Issuer or the pool of collateral to be registered as an investment company under the Investment Company Act;
16. is not the subject of an offer of exchange, or tender by its obligor or Issuer, for cash, securities or any other type of consideration other than (a) a permitted offer or (b) an exchange offer in which a loan or a security that is not registered under the Securities Act is exchanged for a loan or a security that has substantially identical terms (except for transfer restrictions) but is registered under the Securities Act or a loan or a security that would otherwise qualify for purchase under the investment criteria described under this indenture; provided that, any such security must upon acquisition by the Issuer following the exchange constitute a security received in lieu of a debt previously contracted (i.e., a collateral obligation previously acquired by the Issuer) for purposes of the loan securitization exclusion under the Volcker Rule;
17. is issued by a non emerging market obligor that is domiciled in the United States, a group I country, a group II country, a group III country or Singapore;
18. is not a zero-coupon security, a step-up obligation or a step-down obligation;

19. is not a long-dated obligation (unless such obligation is being acquired in an exchange transaction, is a swapped defaulted obligation or is subject to a maturity amendment in accordance with the terms thereof);
20. is not a small obligor loan or an interest only security;
21. is not (a) an equity security or (b) by its terms convertible into or exchangeable for an equity security and does not include an attached equity warrant;
22. unless such obligation is being acquired in connection with an exchange transaction or a swapped defaulted obligation, does not have a Moody's rating lower than "Caa3";
23. does not have an "sf" subscript assigned by Moody's;
24. if it is a "registration-required obligation" within the meaning of Section 163(f)(2)(A) of the Code, is registered;
25. is not a bridge loan;
26. is not a related obligation; and
27. is purchased at a purchase price not less than the Minimum Price other than in accordance with clause (q) of the Concentration Limitations; and
28. is not a debt obligation of an obligor or borrower thereof whose principal business is directly derived from the production or marketing of controversial weapons (including antipersonnel landmines, cluster weapons, chemical and biological weapons) or development of nuclear weapon programs or production of nuclear weapons.

Priority of payments

Application of interest proceeds

1. Taxes and fees
2. Administrative expenses, subject to a cap
3. Senior management fee
4. Payments relating to hedge agreements, pro rata
5. Interest on Class A-1
6. Interest on Class A-2
7. Interest on Class B
8. Class A/B coverage tests
9. Interest on Class C
10. Deferred interest on Class C
11. Class C coverage tests
12. Interest on Class D
13. Deferred interest on Class D
14. Class D coverage tests
15. Interest on Class E
16. Deferred interest on Class E

17. Class E coverage tests
18. During the reinvestment period, if the reinvestment test is not satisfied, up to 50% of the remaining interest proceeds may be used to purchase assets; or if the manager is unable to purchase appropriate assets, any remaining interest proceeds may be used to repay the notes sequentially
19. On the first payment date, if the ratings are not confirmed upon the effective date, all interest proceeds deposited into interest collection account
20. If the ratings are not confirmed upon the effective date, to redeem the notes sequentially until the ratings are confirmed*
21. Subordinated management fee
22. Remaining administrative expenses
23. Payment to each contributor, pro rata
24. Subordinated notes until the target return is met
25. After the target return is met, 80% of the remaining proceeds to the subordinated securities and 20% to the manager

Application of principal proceeds

1. Steps 1 through 7 of interest waterfall if not fully paid
2. Class A/B coverage test
3. Class C coverage tests
4. Class D coverage tests
5. Class E coverage tests
6. If Class C is the most senior class outstanding, payment of interest on Class C
7. If Class C is the most senior class outstanding, payment of deferred interest on Class C
8. If Class D is the most senior class outstanding, payment of interest on Class D
9. If Class D is the most senior class outstanding, payment of deferred interest on Class D
10. If Class E is the most senior class outstanding, payment of interest on Class E
11. If Class E is the most senior class outstanding, payment of deferred interest on Class E
12. If the ratings are not confirmed upon the effective date, to redeem the notes sequentially until the ratings are confirmed *
13. If a special redemption date, to pay the notes in accordance with the note payment sequence
14. During the reinvestment period, to reinvest in additional assets or after the reinvestment period, to reinvest in additional assets or eligible investments using principal proceeds from prepayments and sales of credit risk and credit improved securities
15. Make payments on the notes in accordance with the note payment sequence
16. Steps 21 to 23 of the interest waterfall if not fully paid
17. Subordinated notes until the target return is met
18. After the target return is met, 80% of the remaining proceeds to the subordinated securities and 20% to the manager

* See [Moody's Clarifies Policy for the Issuance of RACs](#) (January 2012) which makes clear that the provision of a RAC remains entirely within Moody's discretion, and it may be that Moody's will not provide a RAC even if the transaction documents, to which Moody's is not a party, require it.

Sources used in this report

The sources we used in preparation of this report include:

- » Moody's Investors Service
- » Information from the arranger
- » CLO's legal documents
- » Information from the manager

Moody's related publications

- » [Moody's Global Approach to Rating Collateralized Loan Obligations](#)
- » [CLO Interest](#)
- » [Moody's Structured Finance Quick Check](#)
- » [CLOs - US, EMEA, Global: Market Pulse](#)
- » [CLOs – US: 2019 Outlook – Continued economic growth will foster stable performance amid weakening in loan quality, looser structure](#)
- » [CLOs – Europe: 2019 Outlook – Documentation and collateral will weaken, but performance will remain strong](#)
- » [Sector Update – Q2 2019: CLO issuance soldiers on despite volatility and mixed credit signals](#)
- » [Sector Update – Q2 2019: Performance and corporate credit metrics worsened, but issuance remained solid](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- 1 To determine the occurrence of an OC-based event of default, the CLO measures the OC ratio by dividing the portfolio's par amount by the outstanding principal amount of the senior-most notes.

© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1191720

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454